

1 **WHAT IS CLAIMED IS:**

2 1. A feeding device for a table saw comprising:

3 a sliding board adapted to be slidably mounted on one side of a
4 worktable of the table saw and having a moving direction corresponding to a
5 saw blade of the table saw, the sliding board including two grooves defined in
6 two opposite sides thereof, the two grooves respectively parallel to the moving
7 direction of the sliding board;

8 a moving seat selective slidably mounted on one side of the sliding
9 board;

10 a pushing rod laterally slidably mounted to the moving seat and
11 having a first side forming a pushing face adapted to abut against a datum of a
12 workpiece; and

13 a first locking device and a second locking device respectively
14 extending through the pushing rod and the moving seat to selectively hold the
15 pushing rod and the moving seat in place on the sliding board and confirm a
16 cutting angle of the workpiece, wherein a distance between the first locking
17 device and the saw blade is shorter than that between the second locking device
18 and the saw blade.

19 2. The feeding device as claimed in claim 1, wherein:

20 the first locking device comprises a threaded rod extending
21 through the pushing rod and a sliding block slidably received in a
22 corresponding one of the two grooves in the sliding board, the sliding block
23 having a threaded hole defined therein and the threaded rod screwed into the
24 threaded hole to hold the sliding block in place; and

1 the second locking device comprises a threaded rod extending
2 through the moving seat and a sliding block slidably received in a
3 corresponding one of the two grooves in the sliding board, the sliding block of
4 the second locking device having a threaded hole defined therein and the
5 threaded rod of the second locking device screwed into the threaded hole in the
6 sliding block of the second locking device to hold the sliding block of the
7 second locking device in place.

8 3. The feeding device as claimed in claim 1, wherein the moving seat
9 comprises a rail laterally extending therefrom and having a T-shaped
10 cross-section, and the pushing rod comprises a sliding groove laterally defined
11 in a second side of the pushing rod for slidably receiving the rail of the moving
12 seat.

13 4. The feeding device as claimed in claim 1 further comprising a
14 graduation plate securely attached to the sliding block of the second locking
15 device, the graduation plate having a series of scales formed on an arc edge
16 thereof, thereby the moving seat includes an indicator attached to one end of the
17 moving seat and corresponding to the series of the graduation plate for
18 indicating an operating angle of the moving seat and the pushing rod.

19 5. The feeding device as claimed in claim 2, wherein the threaded rods
20 of the first locking device and the second locking device each has a handle
21 extending therefrom for easily operating the threaded rods.

22 6. The feeding device as claimed in claim 2, wherein the moving seat
23 comprises a rail laterally extending therefrom and having a T-shaped
24 cross-section, and the pushing rod comprises a sliding groove laterally defined

1 in a second side of the pushing rod for slidably receiving the rail of the moving
2 seat.

3 7. The feeding device as claimed in claim 2 further comprising a
4 graduation plate securely attached to the sliding block of the second locking
5 device, the graduation plate having a series of scales formed on an arc edge
6 thereof, thereby the moving seat includes an indicator attached to one end of the
7 moving seat and corresponding to the series of the graduation plate for
8 indicating an operating angle of the moving seat and the pushing rod.

9 8. The feeding device as claimed in claim 3 further comprising a
10 graduation plate securely attached to the sliding block of the second locking
11 device, the graduation plate having a series of scales formed on an arc edge
12 thereof, thereby the moving seat includes an indicator attached to one end of the
13 moving seat and corresponding to the series of the graduation plate for
14 indicating an operating angle of the moving seat and the pushing rod.

15 9. The feeding device as claimed in claim 4, wherein:

16 the moving seat comprises:

17 a bore defined in the moving seat;

18 a steel ball movably received in the bore in the moving seat
19 and partially extending through a bottom of the moving seat;

20 a spring longitudinally compressively received in the bore in
21 the moving seat for abutting against the steel ball; and

22 a blot partially screwed into the bore to hold the steel ball and
23 the spring in place in the bore; and

24 the graduation plate comprises multiple dimples defined for

1 partially receiving the steel ball, each dimple situated on a certain angle for
2 quickly orientating the moving seat and the pushing rod.

3 10. The feeding device as claimed in claim 7, wherein:

4 the moving seat comprises:

5 a bore defined in the moving seat;

6 a steel ball movably received in the bore in the moving seat
7 and partially extending through a bottom of the moving seat;

8 a spring longitudinally compressively received in the bore in
9 the moving seat for abutting against the steel ball; and

10 a blot partially screwed into the bore to hold the steel ball and
11 the spring in place in the bore; and

12 the graduation plate comprises multiple dimples defined for
13 partially receiving the steel ball, each dimple situated on a certain angle for
14 quickly orientating the moving seat and the pushing rod.

15 11. The feeding device as claimed in claim 8, wherein:

16 the moving seat comprises:

17 a bore defined in the moving seat;

18 a steel ball movably received in the bore in the moving seat
19 and partially extending through a bottom of the moving seat;

20 a spring longitudinally compressively received in the bore in
21 the moving seat for abutting against the steel ball; and

22 a blot partially screwed into the bore to hold the steel ball and
23 the spring in place in the bore; and

24 the graduation plate comprises multiple dimples defined for

- 1 partially receiving the steel ball, each dimple situated on a certain angle for
- 2 quickly orientating the moving seat and the pushing rod.